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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/824,708

04/04/2001

Masaki Takakuwa

1-130

1769

23400

7590

12/04/2003

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EXAMINER

JENKINS, JERMAINE L

ART UNIT

PAPER NUMBER

2855

DATE MAILED: 12/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/824,708

Applicant(s)

TAKAKUWA ET AL.

Examiner

Jermaine Jenkins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,7 and 12 is/are rejected.
- 7) ☒ Claim(s) 2-6,8-11,13 and 14 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: .

DETAILED ACTION

1. The Information Disclosure Statement (PTO-1449) in the Amendment filed on 11/22/02 was previously considered on 05/31/02. A file copy has been submitted.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baba et al (5,747,694) in view of Arvanitakis (4,410,433).

Baba et al teaches the claimed limitations including a housing (11) having an pressure introduction port (19), a sensor element unit (24) disposed in the housing (11) for detecting a pressure based on pressure introduced into the housing (11) through the pressure introduction port (19) (Column 3, line 41 – Column 4, line 5; See Figure 1). Baba et al teaches a filter (20) disposed horizontally across the environmental pressure passage (19). However, Baba et al does not teach the filter having a filter surface that is positioned along a gravitational direction when the pressure sensor is used.

Arvanitakis teaches a vertical filter (106) having a gravitational direction (Abstract, Column 4, lines 17-38). Since Baba et al teaches that preventing clogs is an important feature by having a vertical orientation of the housing (Column 10, lines 48-52, See Figures 12 & 13), it

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would have been obvious to one of ordinary skill in the art at the time the invention to manufacture a vertical filter as taught by Arvanitakis in the pressure sensing apparatus Baba et al for the purpose of further preventing the water repellent filter from choking with blocked contaminant.

3. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baba et al (5,747,694).

In regards to claim 7, Baba et al teaches the claimed invention except for the environmental pressure introduction port is divided into a plurality of opening portions that are covered with the filter. However, it would have been obvious to one of ordinary skill in the art at the time the invention to provide a filter covering over any opening for its well-known function of preventing contaminants for entering any vital location of a pressure sensing apparatus.

4. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baba et al (5,747,694) in view of Banks et al (5,195,376).

In regards to claim 12, Baba et al teaches the claimed invention except for a case having an environmental pressure introduction passage extending in a horizontal direction.

Banks et al teaches a fluid pressure differential monitor having a horizontal passage (P) (Abstract; Column 5, lines 2-6; See Figure 1) for introducing pressure into the monitoring system. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention to provide a horizontal passage as taught by Banks et al within the sensing apparatus of Baba et al for the purpose of introducing pressure to be measured from many directions or angles

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within the environment to accurately determine the pressure measurements in the surrounding environs.

Allowable Subject Matter

5. Claims 2-6, 8-11, 13 & 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- U.S. Patent 4,051,032 (Borchardt) – Water Treatment System
- U.S. Patent 5,240,593 (Moredock) – Apparatus for the Purification of Fluids

Response to Arguments

7. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that U.S. Patent 5,747,694 (Baba et al) does not teach the filter having a filter surface that is positioned along a gravitational direction.

This argument is moot in view of U.S. Patent 4,410,433 (Arvanitakis) that clearly teaches that the positioning of filter along a gravitational (vertical) direction is well known. Therefore Baba et al and Arvanitakis references read upon the claimed invention.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermaine Jenkins whose telephone number is 703-305-3839. The examiner can normally be reached on Monday-Friday 8am-430pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 703-305-4816. The fax phone number for the organization where this application or proceeding is assigned is 703-306-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-3431.

Jermaine Jenkins
A.U. 2855


EDWARD LEFKOWITZ
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